

=> s us4738974/pn  
L15 1 US4738974/PN

=> analyze l15  
ENTER ANSWER NUMBER OR RANGE (1-):1  
ENTER DISPLAY CODE (TI) OR ?:rn  
L16 ANALYZE L15 1 RN : 8 TERMS

	SINCE FILE	TOTAL
	ENTRY	SESSION
COST IN U.S. DOLLARS	115.02	332.26
FULL ESTIMATED COST		
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-14.32	-14.32

FILE 'REGISTRY' ENTERED AT 15:23:40 ON 09 DEC 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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provided by InfoChem.

STRUCTURE FILE UPDATES: 8 DEC 2003 HIGHEST RN 625077-42-1  
DICTIONARY FILE UPDATES: 8 DEC 2003 HIGHEST RN 625077-42-1

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

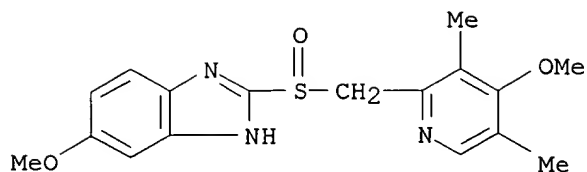
Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> s l15  
L17 0 US4738974/PN

=> s l16  
L18 8 L16

=> d 1-8

L18 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 95510-76-2 REGISTRY  
CN 1H-Benzimidazole, 5-methoxy-2-[[4-methoxy-3,5-dimethyl-2-  
pyridinyl)methyl]sulfinyl]-, lithium salt (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Omeprazole lithium salt  
DR 226903-60-2  
MF C17 H19 N3 O3 S . Li  
LC STN Files: CA, CAPLUS, DRUGPAT, DRUGUPDATES, USPATFULL  
CRN (73590-58-6)



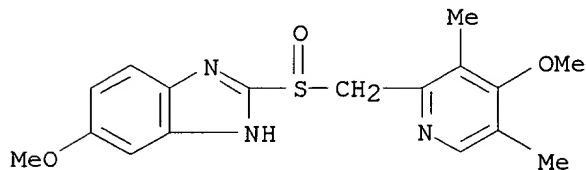
● Li

6 REFERENCES IN FILE CA (1907 TO DATE)  
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L18 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
RN **95510-75-1** REGISTRY  
CN Guanidine, compd. with 5-methoxy-2-[[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole (1:1) (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1H-Benzimidazole, 5-methoxy-2-[[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, compd. with guanidine (1:1) (9CI)  
DR 226903-94-2  
MF C17 H19 N3 O3 S . C H5 N3  
LC STN Files: CA, CAPLUS, DRUGPAT, DRUGUPDATES, USPATFULL

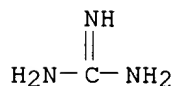
CM 1

CRN 73590-58-6  
CMF C17 H19 N3 O3 S



CM 2

CRN 113-00-8  
CMF C H5 N3



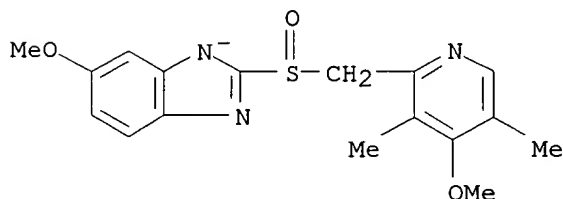
3 REFERENCES IN FILE CA (1907 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L18 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
RN **95510-74-0** REGISTRY  
CN 1-Butanaminium, N,N,N-tributyl-, salt with 5-methoxy-2-[[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole (1:1) (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1H-Benzimidazole, 5-methoxy-2-[[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]-, ion(1-), N,N,N-tributyl-1-butanaminium (9CI)  
MF C17 H18 N3 O3 S . C16 H36 N  
LC STN Files: CA, CAPLUS, DRUGPAT, DRUGUPDATES, USPATFULL

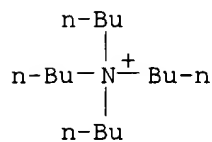
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CRN 95510-73-9  
CMF C17 H18 N3 O3 S



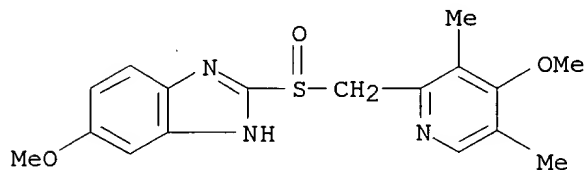
CM 2

CRN 10549-76-5  
CMF C16 H36 N



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L18 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
RN **95510-72-8** REGISTRY  
CN 1H-Benzimidazole, 5-methoxy-2-[[4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, calcium salt (9CI) (CA INDEX NAME)  
DR 226903-79-3, 228248-87-1  
MF C17 H19 N3 O3 S . 1/2 Ca  
LC STN Files: CA, CAPLUS, DRUGPAT, DRUGUPDATES, USPATFULL  
CRN (73590-58-6)

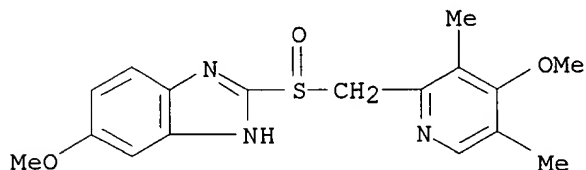


● 1/2 Ca

6 REFERENCES IN FILE CA (1907 TO DATE)  
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L18 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

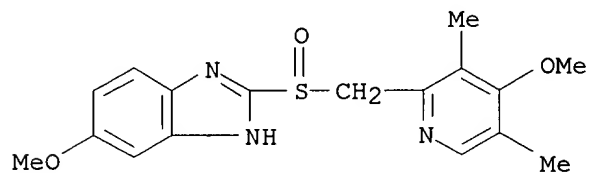
RN **95510-71-7** REGISTRY  
 CN 1H-Benzimidazole, 5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)  
 DR 226903-70-4  
 MF C17 H19 N3 O3 S . K  
 LC STN Files: CA, CAPLUS, DRUGPAT, DRUGUPDATES, TOXCENTER, USPATFULL  
 CRN (73590-58-6)



● K

10 REFERENCES IN FILE CA (1907 TO DATE)  
 10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L18 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **95510-70-6** REGISTRY  
 CN 1H-Benzimidazole, 5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN (.+-.)-Omeprazole sodium salt  
 CN H 168/68 sodium  
 CN Losec Sodium  
 CN Omeprazole sodium  
 CN Omeprazole sodium salt  
 DR 142706-19-2, 226903-65-7  
 MF C17 H19 N3 O3 S . Na  
 CI COM  
 LC STN Files: ADISINSIGHT, BIOSIS, BIOTECHNO, CA, CAPLUS, CHEMCATS, CIN, DRUGPAT, DRUGUPDATES, EMBASE, IPA, RTECS\*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 CRN (73590-58-6)



● Na

32 REFERENCES IN FILE CA (1907 TO DATE)  
 32 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L18 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN **95382-33-5** REGISTRY  
 CN Magnesium, bis[5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl-.kappa.O]-1H-benzimidazolato-.kappa.N1]-, (T-4)-  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Benzimidazole, 5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium complex

CN Magnesium, bis[5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazolato]-, (T-4)-

OTHER NAMES:

CN Magnesium omeprazole

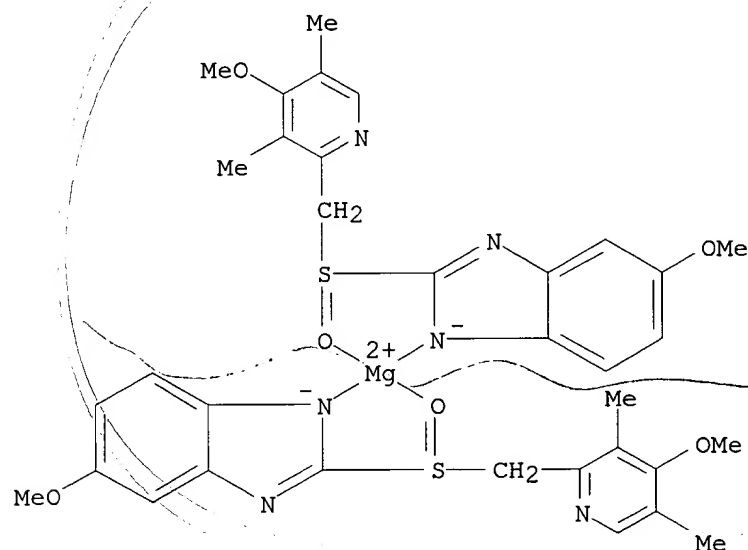
CN Omeprazole magnesium

DR 228248-86-0

MF C34 H36 Mg N6 O6 S2

CI CCS, COM

LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, CIN, DIOGENES, DRUGPAT, DRUGUPDATES, IPA, TOXCENTER, USAN, USPAT2, USPATFULL



*racemizable*

30 REFERENCES IN FILE CA (1907 TO DATE)

30 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L18 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN **95382-32-4** REGISTRY

CN Titanium, bis[5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazolato-.kappa.N1]bis[5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl-.kappa.O]-1H-benzimidazolato-.kappa.N1]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

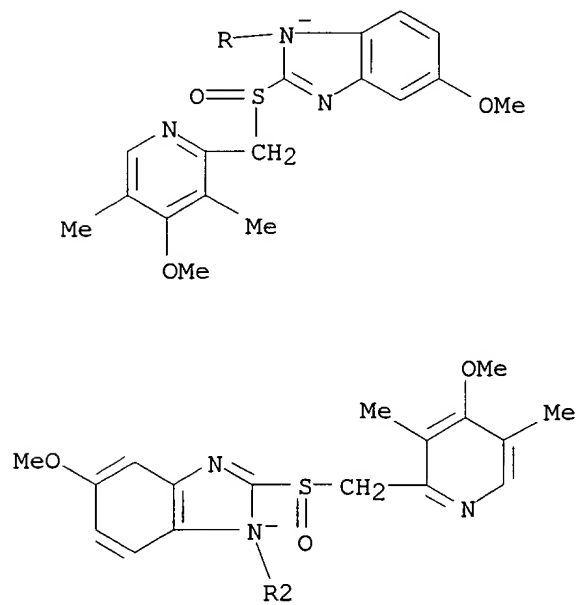
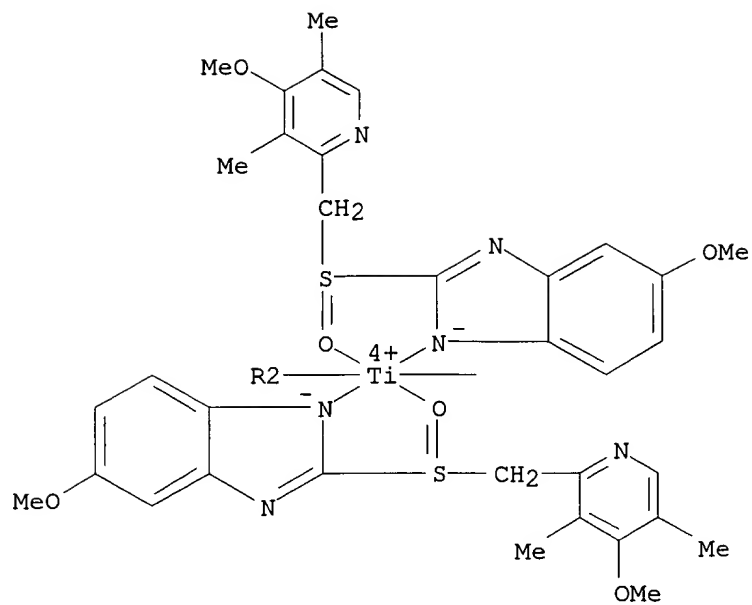
CN 1H-Benzimidazole, 5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, titanium complex

CN Titanium, bis[5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazolato]bis[5-methoxy-2-[[ (4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazolato-N1]-

MF C68 H72 N12 O12 S4 Ti

CI CCS

LC STN Files: CA, CAPLUS, DRUGPAT, DRUGUPDATES, USPATFULL



2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s us5900424/pn  
L1 1 US5900424/PN

=> d bib abs

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1995:438158 CAPLUS  
DN 122:196964  
TI Preparation of magnesium omeprazole in a crystalline form  
IN Kaellstroem, Lars Aake; Nygren, Monica Annelie  
PA Astra AB, Swed.  
SO PCT Int. Appl., 15 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9501977	A1	19950119	WO 1994-SE680	19940708
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
	RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	IN 182619	A	19990515	IN 1994-DE782	19940622
	TW 504509	B	20021001	TW 1994-83105710	19940623
	IL 110190	A1	20000726	IL 1994-110190	19940701
	ZA 9404933	A	19950220	ZA 1994-4933	19940707
	EG 21437	A	20011031	EG 1994-407	19940707
	AU 9471981	A1	19950206	AU 1994-71981	19940708
	AU 679766	B2	19970710		
	EP 707580	A1	19960424	EP 1994-921154	19940708
	EP 707580	B1	20020130		
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	CN 1126993	A	19960717	CN 1994-192733	19940708
	CN 1064680	B	20010418		
	BR 9406940	A	19960910	BR 1994-6940	19940708
	JP 08512315	T2	19961224	JP 1995-504005	19940708
	CA 2166794	C	19970304	CA 1994-2166794	19940708
	HU 75314	A2	19970528	HU 1995-3873	19940708
	PL 175999	B1	19990331	PL 1994-312440	19940708
	RU 2139868	C1	19991020	RU 1996-102079	19940708
	SK 281230	B6	20010118	SK 1996-22	19940708
	CZ 288933	B6	20010912	CZ 1996-69	19940708
	EP 1164132	A2	20011219	EP 2001-117362	19940708
	EP 1164132	A3	20020102		
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	AT 212628	E	20020215	AT 1994-921154	19940708
	JP 2002105072	A2	20020410	JP 2001-293480	19940708
	ES 2100136	T3	20020901	ES 1994-921154	19940708
	US 5900424	A	19990504	US 1994-313342	19940927 <--
	NO 9600068	A	19960105	NO 1996-68	19960105
	FI 9600101	A	19960109	FI 1996-101	19960109
	HK 1008329	A1	20020517	HK 1998-109227	19980717
PRAI	SE 1993-2396	A	19930709		
	EP 1994-921154	A3	19940708		
	JP 1995-504005	A3	19940708		
	WO 1994-SE680	W	19940708		
AB	This invention provides a method for full scale prodn. of Mg omeprazole in				

a cryst. form with a degree of crystallinity of  $\geq 70\%$  as detd. by x-ray powder diffraction, to be used in the manuf. of pharmaceutical formulations, such as tablets. Thus, a mixt. contg. MeOH, Mg, and  $\text{CH}_2\text{Cl}_2$  was heated and after cooling it to  $15^\circ\text{C}$ , omeprazole was added. The liq. was seeded with Mg omeprazole crystals and the salt was pptd. by addn. of water. After completion of the crystn., the crystals were centrifuged off and washed with a mixt. of MeOH and water. The produced Mg omeprazole had a degree of crystallinity of 76%, a particle size of  $19\mu\text{m}$ , a d. of  $1.342\text{g/mL}$ , a hygroscopicity of 1.62% increase upon storage for 1 mo at 94% relative atm. humidity, a moisture content of 7.6%, and a MeOH content of 0.006%.



=> d 1-4

L3 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN

RN 95382-33-5 REGISTRY

CN Magnesium, bis[5-methoxy-2-[[[4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-.kappa.O]-1H-benzimidazolato-.kappa.N1]-, (T-4)-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Benzimidazole, 5-methoxy-2-[[[4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium complex

CN Magnesium, bis[5-methoxy-2-[[[4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazolato]-, (T-4)-

OTHER NAMES:

CN Magnesium omeprazole

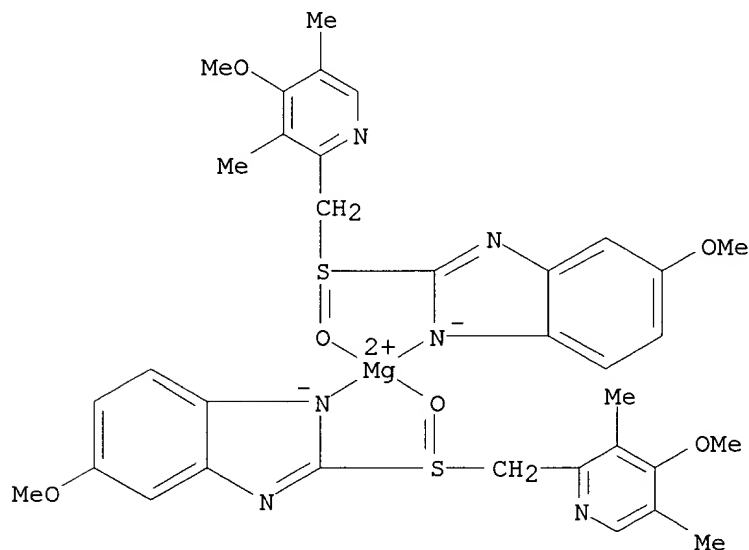
CN Omeprazole magnesium

DR 228248-86-0

MF C34 H36 Mg N6 O6 S2

CI CCS, COM

LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, CIN, DIOGENES, DRUGPAT, DRUGUPDATES, IPA, TOXCENTER, USAN, USPAT2, USPATFULL



30 REFERENCES IN FILE CA (1907 TO DATE)

30 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN

RN 73590-58-6 REGISTRY

CN 1H-Benzimidazole, 5-methoxy-2-[[[4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (.+-.)-Omeprazole

CN 2-[[[3,5-Dimethyl-4-methoxy-2-pyridyl)methyl]sulfinyl]-5-methoxy-1H-benzimidazole

CN Acidex

CN Antra

CN Antra MUPS

CN Audazol

CN Aulcer

CN Belmazol  
 CN Ceprandal  
 CN Desec  
 CN Dizprazol  
 CN Dudencer  
 CN Elgam  
 CN Emeproton  
 CN Epirazole  
 CN Gastrimut  
 CN Gastroloc  
 CN Gastrozole  
 CN Gibancer  
 CN H 168/68  
 CN Indurgan  
 CN Inhibitron  
 CN Inhipump  
 CN Logastric  
 CN Lomac  
 CN Losec  
 CN Mepral  
 CN Miol  
 CN Miracid  
 CN Mopral  
 CN Ocid  
 CN Omapren  
 CN Omebeta 20  
 CN Omed  
 CN Omedar  
 CN OMEP  
 CN Omepradex  
 CN Omepral  
 CN Omeprazen  
 CN Omeprazole  
 CN Omeprazon  
 CN Omepril  
 CN Omezol  
 CN Omezzol  
 CN Omid  
 CN Omisec  
 CN Omizac  
 CN OMP  
 CN Ompanyt  
 CN OMZ

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
 DISPLAY

FS 3D CONCORD

DR 172964-80-6, 131959-78-9

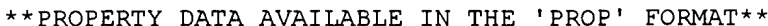
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CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*,  
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,  
 CEN, CHEMCATS, CIN, CSCHM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT,  
 DRUGU, DRUGUPDATES, EMBASE, HSDB\*, IPA, MEDLINE, MRCK\*, PHAR,  
 PHARMASEARCH, PIRA, PROMT, RTECS\*, SYNTHLINE, TOXCENTER, USAN, USPAT2,  
 USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: WHO



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L3 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 109-88-6 REGISTRY
CN Methanol, magnesium salt (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Magnesium methoxide (6CI, 7CI)
OTHER NAMES:
CN Bis(methoxy)magnesium
CN Dimethoxymagnesium
CN Magnesium dimethoxide
CN Magnesium methylate
DR 27428-49-5
MF C H4 O . 1/2 Mg
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, GMELIN*, IFICDB, IFIPAT,
IFIUDB, MSDS-OHS, PIRA, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (67-56-1)

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$$\text{H}_3\text{C}-\text{OH}$$

● 1/2 Mg

380 REFERENCES IN FILE CA (1907 TO DATE)  
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
381 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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L3      ANSWER 4 OF 4  REGISTRY  COPYRIGHT 2003 ACS on STN
RN      67-56-1  REGISTRY
CN      Methanol (8CI, 9CI)  (CA INDEX NAME)
OTHER NAMES:
CN      Bielecki's solution
CN      Carbinol
CN      Methanol cluster
CN      Methyl alcohol
CN      Methyl hydroxide
CN      Methylol
CN      Monohydroxymethane
CN      NSC 85232
CN      Solutions, Bielecki's
CN      Wood alcohol

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:  
FS 3D CONCORD  
DR 54841-71-3  
MF C H4 O  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS,  
BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,  
CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,  
DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,  
ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB,  
IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA,  
PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2,  
USPATFULL, VETU, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>3</sub>C-OH

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

115608 REFERENCES IN FILE CA (1907 TO DATE)  
1372 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
115770 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)